## **IN THE SPECIFICATION:**

Please amend [0061] of the specification as follows:

[0061] To describe the in-chamber mixture temperature control system 60 in more detail with reference to the block diagram shown in Fig. 15, when a temperature control switch 66 is first turned ON and a changeover switch 67 is turned ON for preheating, a preheating operation for the heating section 64 is started under the control of the temperature controller 63. The preheating operation is to be performed while measuring the temperature of the heating section 64 using a sensor 65 and feeding back the measured value to the temperature controller 63. The preheating temperature is to be specified by a computer 61. The computer 61 is incorporated in the laptop computer 50. The numeral 69 indicates a solid-state relay (SSR).

Please amend [0062] of the specification as follows:

[0062] When the temperature of the heating section 64 reaches a predetermined preheating temperature and the cell observation chamber 30 is placed on the heating section section 64, the changeover switch is turned ON for heating to start a heating operation for the heating section 64 under the control of the temperature controller 62. This heating operation, which aims at heating the mixture in the chamber to be a predetermined temperature, is to be performed while measuring the temperature of the mixture in the chamber using the sensor 35 and feeding back the measured value to the temperature controller 62. The heating temperature is to be specified by the computer 61. Since the heating section 64 has been heated to be the predetermined temperature through the foregoing preheating operation, this heating operation can heat the mixture in the chamber to be the predetermined temperature in a short time.